The Program Review and Investigations Committee

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Testimony of

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Office of Consumer Counsel, Mary Healey, Consumer Counsel

S.B. 1086, An Act Implementing The Recommendations Of The Program Review And Investigations Committee Concerning The Creation Of A Governance Structure To Implement E-Government.

S.B. 1088, An Act Implementing The Recommendations Of The Program Review And Investigations Committee Concerning E-Government.

Oral Testimony To The Program Review and Investigations Committee

I am the state of Connecticut Broadband Policy & Programs Coordinator, and thus am the project manager for a $4 million federal stimulus grant for the next four years by the U.S. Department of Commerce. The grant pays for :

- data collection & mapping of the current status of broadband access in Connecticut,
- creation of a five-year strategic plan for improving access to and adoption of broadband services across the state, and
- creates a single point of contact for the state to represent its broadband interests.

My goal is for broadband to be one of Connecticut's most important *advantages* and there are many reasons for hope =

- the state is virtually built out with high-speed Internet access, so "access to broadband" is not as huge a problem in this state than in more rural states;
- great demographics for broadband usage, with a high standard of living and per capita income, high education standards with great state and private universities located here;
- high tech and other innovation companies based here, with their much higher broadband needs;

But, what Connecticut has lacked to date is a driving force inside government, state and municipal. We need champions, allies, and a will to drastically change the way government operates. It is time that Connecticut state government shook itself awake and accepted that "business as usual" hasn't been working and now is the optimal time shake things up.

The federal grant authorities were frank with me when I applied for broadband stimulus funding on behalf of the state : they were not convinced that Connecticut was prepared to properly spend $2 million in implementation funding due to the fact that Connecticut had no "office" or position devoted to broadband enhancement. Thus, I was not able to convince the U.S. government to fund an extra $2 million to "implement" the action steps that will be contained in the state's five-year strategic plan that I am presently developing.

Huge deficits, many decades of neglect of this issue, a new administration, and a motivated General Assembly are all strong drivers for positive change at this time. If we fail to use this crisis as a starting bell for jump starting the way Connecticut government "does business", however, when will it ever happen?

I am not recommending more regulation on business or the providers, but to the contrary, I'm urging that Connecticut's state and municipal governments should lead by example: great e-government programs will spark further demand by the public, residents and businesses, which will in turn spark further supply by the providers who will follow that demand.

I believe the two broadband bills presented to you today represent an excellent starting point for this state's government to start the disruptive processes that are the only way to shake things up and move Connecticut from the middle of the pack to the top. That process must include economic and business development, attracting high-paying and important jobs, and continuing to build on the excellent lifestyle that Connecticut offers its residents.

The focus for the 5-year strategic plan I am developing is to expand e-government and support the expansion of Internet use by businesses across the state to in turn increase broadband access and adoption across all populations and communities. While e-government and increasing the role of broadband in business may sound like two different ideas, but I've found that best practices that work for government will also work for increasing business opportunities, and vice versa.

The synergy at work in this broadband plan is that it is clear that if broadband usage can be increased by business and its customers, the benefits are not only increased business and customer satisfaction, but also increased access to broadband because the Internet service providers will perceive economic benefits to themselves by the increased demand for access and speed.

As businesses continue to demand greater speed and enhanced access to broadband (e.g., through more demand for "virtual office" applications and access for their key employees to "telework" while away from their actual office), this will in turn drive greater competitive provision of broadband services across the state. This will benefit all potential users of broadband services, and will serve to overcome the uneconomic provision of service in certain communities across Connecticut that do not have the critical mass of users necessary to justify increasing access in those areas.

The membership and powers of the e-government board must be carefully analyzed in practical ways that do not simply follow the usual course and do not cast the usual set of characters. If Connecticut fails to act in responsible and dynamic ways in the near future, after a decade or more of complete inaction in the face of the incredible changes being wrought by broadband services here and abroad, this will be a major opportunity lost . . .yet again.

Profile of the $ 4 million federal stimulus grant provided Connecticut by the U.S. Department of Commerce (National Telecommunications & Information Authority- the NTIA)

- I am the state of Connecticut Broadband Policy & Programs Coordinator.
- As part of the responsibilities in this position, I am project manager for a $4 million federal stimulus grant for the next four years by the U.S. Department of Commerce (National Telecommunications & Information Authority- NTIA). The Department of Public Utility Control is the legal grantee on behalf of the state of Connecticut.
- The grant pays for data collection/mapping of the current status of broadband access in Connecticut, requires creation of a five-year strategic plan for improving access to and adoption of broadband services across the state, and creates a single point of contact for the state to represent its broadband interests.
- The federal government required each state (56 sovereign entities) to have a representative devoted to stimulating increased access to and adoption of broadband services.
- In drafting the Connecticut application, I laid out a proposal for a 5-year Strategic Plan for increasing access to and use of broadband services by all entities in the state, including state and municipal governments, residents, educational and health organizations, and businesses. This proposal called for the state's plan to include methods to:
    - identify the status of broadband access and use by residents and businesses;
    - coordinate the activities of state government in a collaborative manner to enhance provision of e-government services;
    - work with the Department of Information Technology to present the data collected through an interactive web-based map;
    - create a website dedicated to broadband issues to help promote the use of new web-bases services
- This proposal was successful to the extent of:
    - the state being awarded nearly $4 million in funding to collect data of broadband use in the state,
    - the creation of an interactive map displaying that data,
    - the creation of a position of coordinator to attempt to focus the state's efforts in this regard, and
    - the creation of a five-year strategic plan to increase access to broadband to all parts of the state and to enhance adoption by more individuals and businesses that remain non-adopters of these services.
- It was recognized early during the application process, however, that Connecticut had no champion or "face of broadband" for competitors and supporters alike to use for interactions regarding broadband improvements.
- The grant funding is intended to create "state broadband leaders" who will help "coordinate" the broadband use and adoption of the many different and divergent

groups that are focused on business development by uplifting our different population groups and communities. The hope is that this will provide everyone in Connecticut with the personal opportunities they deserve and the state's residents and businesses can each enhance their contribution to the general economy and employment situation of the state.

- Connecticut's state government cannot afford to continue to sit idly by as other states accelerate their activities in promoting broadband services to their citizens, business and residential alike. This pattern was slated to continue into the future until the federal broadband stimulus grant opportunity presented itself.
- In fact, with minor exceptions, Connecticut has done virtually nothing to promote access and adoption of high-speed Internet use among its residents, businesses, and its government.
- As a result, Connecticut remains way behind the curve for such intervention in the telecommunications market by the state.
- For Connecticut, the federal funding at least jumpstarts that effort for the short term and of course it is hoped that the state will ultimately continue this course in order to become more competitive in the nation and across the world in the future.
- States such as Massachusetts, Maine, North Carolina, and Colorado have had a successful broadband policy and implementation office for nearly a decade, professional staffs focusing on business development and increased access for rural unserved and otherwise underserved citizens.
- Bill Vallée =
    - 2009- present - CT Broadband Policy & Programs Coordinator.
    - 2010- Malloy/Wyman Transition Team-Technology, member.
    - 2009-2010- Governor Rell's office for federal broadband stimulus grant applications, grant writer.
    - 2008- present, Broadband Internet Coordinating Council (C.G.S.§ 4d-100), one of the Council's ten voting members (House majority leader appointee).
    - 1996-97- Member of state agency committee to design and implement CT's first website.
    - 1993-present, telephone/cable attorney and legislative liaison at the Office of Consumer Counsel (OCC, state utility consumer advocate).

Written E-Government Testimony

Introduction

I will focus my remarks on this bill regarding e-government development on the topics of governance structure; strategic planning process, collaboration efforts, and project development.

Connecticut is not considered to be a leader at this point in terms of its potential for generating new revenues and jobs . . . , but with a new administration, mounting competition from our peer and neighboring states, and the prospects of disastrous state government deficits requiring a drastic reshaping of state government, the time is clearly ripe for dynamic and fearless action to invigorate the state government's delivery of services to its "customers," residential and business.

While there are probably dozens of entities operating publicly or privately in the state with some focus on broadband services, including the broadband Internet Coordinating Council and the CASE Broadband Committee that is supporting my efforts to develop a five-year strategic Plan for the state, there has not been an effective central position with the intent of coordinating the state's efforts to accelerate access and adoption of these high-speed Internet services.

In fact, none of the existing entities has been at all successful in effecting any change or increasing awareness of the problems that Connecticut faces in trying to improve its access to and use of broadband services.

Benefits of E-Government

The benefits to be derived from aggressively using e-governance to increase use of state government data and replace inefficient bureaucracy include :

- savings on current spending and avoidance future costs;
- increased accountability to verify that state money is being distributed appropriately;
- a reduction in the amount of time it takes to deliver services;
- better accessibility of public services;
- societal benefits to residents and businesses from streamlined and more efficient dealings with the state;
- to help residents and businesses make the right choices about issues critical to them, such as health care, commercial questions, or transportation;
- more transparency and accountability; and
- to create a platform for innovation, in the context of the economy, by creating new economic opportunities for residents and businesses.

It is simply more convenient and cost-effective for businesses and residents to have easy access to the most current government information available without having to spend excessive amounts of time, energy and money to get it. In short, e-government helps simplify processes and makes access to government information more easily accessible for public sector agencies and citizens, thus increasing the efficiency, cost-savings, and productivity of the widest swath of government services users.

Once e-government begins to develop and become more sophisticated, citizens will be forced to interact electronically with the government on a larger scale. It is therefore incumbent on the managers of e-government solutions to concurrently take steps to provide all citizens with methods of access to the e-government broadband solutions. This demand on citizens will in turn create a need for increased supply for all manner of devices and locations for access to broadband services, thus continuing to turn the wheel in favor of a balanced and vibrant market based on supply and demand.

The value of e-government is not only about what citizens prefer, it must be an actual increase in the use of the web channel to provide a huge potential for cost-savings compared to interacting with citizens via call centers and office.

The Focus For The 5-Year Strategic Plan = E-Government And Support Of Business Development Through Increased Broadband Access And Adoption.

E-Government and increasing the role of broadband in business may sound like two different ideas, but I've found that best practices that work for government will also work for increasing business opportunities, and vice versa.

The synergy at work in this broadband plan is that it is clear that if broadband usage can be increased by business and its customers, the benefits are not only increased business and customer satisfaction, but also increased access to broadband because the Internet service providers will perceive economic benefits to themselves by the increased demand for access and speed.

As businesses continue to demand greater speed and enhanced access to broadband (e.g., through more demand for "virtual office" applications and access for their key employees to "telework" while away from their actual office), this will in turn drive greater competitive provision of broadband services across the state. This will benefit all potential users of broadband services, and will serve to overcome the uneconomic provision of service in certain communities across Connecticut that do not have the critical mass of users necessary to justify increasing access in those areas.

While the federally-funded Connecticut 5-year broadband Strategic Plan is in its earliest stages, my thought at this point is to encourage "greater use" of broadband by both business and government . . . thus increasing demand in the marketplace itself, which will in turn cause the providers to perceive a need for increased supply, in the form of greater access (rolling out service where today it is unprofitable to do so) and with greater capacity and speed.

Governments should use the Internet to provide free data in formats that are open, structured and machine-readable, while the Web presence of governments is incrementally reduced as third parties start to provide information to the general public. In this regard, the e-government concepts contained in the present legislative proposal are spot-on toward helping the state government focus on increasing its own use and the demands it can make on all affected parties in increasing use of broadband services by all residents, individuals and businesses.

This should not be confused with increased regulation on the Internet service providers, businesses operating in the state, nor residents. Increased regulation should not be the focus of the state's five-year strategic plan to increase use of broadband, since that could be devastating for the telecommunications industry and commercial

businesses, and in any case it would not necessarily be productive. That said, of course, regulations should always remain in the state's quiver if it proves necessary to drive the conversation forward if the industry fails to reach consensus, or if market power abuses are detected.

So, I am not recommending more regulation on business or the providers.

To the contrary, I'm urging that Connecticut's state and municipal governments should lead by example: great e-government programs will spark further demand by the public, residents and businesses, which will in turn spark further supply by the providers who will follow that demand.

Four priorities for the management of e-government solutions=.

- First is to make sure government effectively manages the state's investment in information technology funding for the e-government functions.
- Second, government must optimize where that money is spent, driving efficiency and effectiveness across the entire government.
- Third is to create an open, transparent and participatory government, creating Web sites like the federal government's successful data.gov.
- Lastly, focus on cybersecurity, creating a new real-time security posture.

The public policy goal is thus to create a state economy and market that will grow high potential businesses, whether from businesses already in the state that might be suffering in the current economic downturn, or businesses that the administration and other government groups can attract to take a chance on the potential changes that hopefully will occur in this state in the near term. These should include an innovation environment that will grow and attract the talent, capital, innovation, in order for CT to once again become a generator of good jobs and increased welfare for all citizens and businesses.

We need to create economic conditions in this state that will promote the growth of our businesses and generate capital supply from government and private sources that are needed to generate new jobs and a strong tax base for the future. It seems clear that the 21st century economy will be pressured by competition from other states as well as other countries literally around the world, thus requiring a focus on high value added jobs and very competitive companies involved in R&D and innovation projects in order to drive Connecticut's economic growth short-term and into the future.

Targeting this objective will leverage our limited resources and produce the greatest impact on our long term prosperity.

Access to and adoption of broadband services will be a key ingredient in Connecticut's chances of besting its competition in the global economy, since the dynamic businesses of the future that the state must attract will require the most advanced digital and virtual connectivity with suppliers, financiers, and markets. This obviously includes workers who demand the positive lifestyle benefits of living in a state like Connecticut, while having the opportunities to virtually work in the multiple labor markets that characterize the 21st century jobs that Connecticut must attract.

The same pattern applies to government's "customers" . . . It is similar to the notion "if you build it, they will come", but neither the state's providers nor its

government will make the investment to build anything on merely a promise of increased prosperity, greater innovation investment, and of course the promise of increased employment.

While it is tempting to think of attempting to solve the problem of those areas and communities in the state where there is literally no broadband choices other than "dial-up" telephone services, but devoting much energy to solving this problem is wholly impractical at this stage due to the state's financial difficulties and its neglect until lately at tackling its broadband inadequacies.

In states such as Massachusetts that have spent the last five years attracting public ($40 million in bonding authority) and private financing (from providers of services and computer companies), and establishing well-staffed and funded organizations devoted to the enhancement of broadband use (e.g., the Massachusetts Broadband Institute), the state already possesses the capacity to immediately devote staff and funding to infrastructure expansion. Connecticut lacks staff or financing and thus must begin the process at an especially difficult time.

The State Is Central To Implementation Of A Successful Broadband Plan

Our new governor and his administration, and the talented legislative members of the General Assembly must actively support and lead the development of an effective and dynamic government that has as a central mission the use of interactive and advanced broadband resources that are needed in this century to provide the support and leadership that Connecticut's business and resident citizens require to compete with the other states of this country as well as countries across the globe.

The competition for jobs and investment is from neighboring cities and states, as well as states across the United States and foreign countries as well. Thus, Connecticut cannot afford to do nothing, even in the face of the daunting financial challenges the government faces, since there is not only the prospect of companies leaving the state, but there has been a demonstrated "brain drain" and reduced investment out of the state over the last decade or more.

Coordination and collaboration among all interested parties in the state, with a strong focus on breaking down the territorial "silos" that exist in government and industry, and including an international concentration that has long been lacking in Connecticut, will be essential to any hope of successfully invigorating the state's economy and use of broadband services for all residents. By networking groups that are either oblivious to the existence of others attempting to make things happen in this regard, or those who have willfully decided to go it alone, the state government can hopefully energize these groups and more efficiently and productively use the finances and mechanisms available.

If Connecticut is to compete with its rivals from all points of the compass, it must develop a brand that immediately signals to all comers that Connecticut stands for a business environment that is ready to reward companies that remain or relocate to the state with innovative support and assistance to get the job done. Connecticut should promote transparency across all facets of state government and making data available is the first step.

Effective e-government requires interagency coordination, cooperation, and collaboration along with the capacity to access, plan and implement with a statewide view. Such broadband-enabled online services can create paths across government's bureaucratic silos producing great productivity and efficiency gains.

It is important that Connecticut state government expand its central role in supporting business development and growth with a long-term commitment combined with strict accounting for all such support. Since the state requires investment by companies of all sizes for jobs to grow here, the state's support must be focused on the specific needs of such investing companies, including reducing business risk and unnecessary regulations so that companies will be comfortable remaining located and being fully engaged in the business of helping Connecticut remain at the front of the competitive race for jobs and investment.

The e-government suggestions in the PRI Report provide a framework for jumpstarting an effort to develop the needed leadership and public policy goals necessary for creating growth in the companies operating in Connecticut while encouraging companies operating in competitive states and nations to establish bases in this state to increase our mutual potential for economic growth..

The state must consequently develop champions and allies in order for public policies and state partnership actions to simulate the development of opportunities for companies to find the government support they will need in the next few critical years while the use of broadband services accelerate investment and job growth across the country and the world.

The state must establish near-term plans to lead by example in its advanced use of broadband technologies in order to stimulate greater usage or demand for enhanced services, thereby driving further supply of high-speed access to the Internet by the providers, increasing access to such services and the adoption of these services by those currently unconnected.

The state's strategic plan must identify commercial ventures of all kinds that are just beginning to operate in Connecticut in order to help them achieve a higher level potential for growth in this state, including developing strategies and retention plans for existing or nascent companies currently here or considering locating to Connecticut.

In fact, there are well-organized groups operating in the state which are skilled and experienced at attempting to bubble up great "adoption" of broadband services among special groups, seniors and low-income citizens, for instance, organizing public/private partnerships to funnel corporate or government funding into social organizations to education youth and other interested community parties in the use of computers and the Internet in the hope of spreading this knowledge among community members.

For example, Comcast, an Internet service provider, recently donated $85,000 through a community organizer, One Economy, to the Hartford Boys and Girls Club to fund a program that Cisco, a broadband equipment provider, has created to certify youth in the use and teaching of Internet services.

One Economy is a global non-profit organization that leverages the power of technology and connects underserved communities around the world by helping to bring broadband into the homes of low-income people, employ youth to train their community members to use technology effectively, and provide public-purpose media properties

that offer a wealth of information on education, jobs, health care and other vital issues. This entity provides a model for how states could successfully aid their non-adopting residents and businesses, and while the state may be able at some point to support these types of programs, but without funding such activities will be especially difficult. One Economy was awarded about $40 million in federal broadband stimulus grant funding.

Introduction To E-Government Processes

Basically, e-government means the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees.

E-government should enable anyone visiting a government website to communicate and interact with government employees via the Internet with graphical user interfaces (GUI), instant-messaging (IM), audio/video presentations, and in ways more sophisticated than a simple email letter to the address provided at the site.

The watchword of e-government should be 'citizen-centric practice' in which the approach to e-government development is one that places citizens at the center, keeping the availability of electronic and mobile services designed with citizens in mind. While e-Government has traditionally been understood as being centered around the operations of government, e-governance is understood to extend the scope by including citizen engagement and participation in governance. As such, e-governance can be defined as the use of Information and Communication Technologies (ICTs) as a tool to achieve better governance.

E-government has been emerging since the early 1990s in industrialized countries such as the United States. However, in most of these countries, e-government has been used on a task-by-task basis rather than in a systemic manner. Certainly, the construction and implementation of e-government is a dynamic and ongoing process. Many e-government websites, particularly those established and operated by governmental agencies, are still in their infancy stage and cannot as yet provide services that are satisfactory in either quantity or quality.

I have noted the differences between states with excellent e-government practices and those that do not, many of which are further bolstered by the PRI report, specifically with reference to the web portals of several best practice states. Connecticut's website and general use of e-government unfortunately fits squarely in the "average category" at this point, and will require much greater focus from all quarters to catch up to the state and other leaders in the area.

But, as the PRI report notes, an innovative and interactive web portal to all e-government services is essential to a successful implementation of the concept and ultimately will dictate the level of success this public policy initiative will achieve.

The wholesale alteration of delivery of state services isn't merely an exercise, but rather about delivering the best service at the lowest cost and in the shortest amount of time, maximizing the productivity of all state resources, including personnel and finances. In turn, this effort can give citizens, residents and businesses, the ability to compete more effectively in the global marketplace by maximizing their access to and use of government services. What is overcome by excellent e-government services is a reduction in the negative effects imposed on users by the large number and variety of

public, private, and nonprofit agencies providing services related to government action. This complexity often makes it difficult for many small and medium-sized businesses, let alone most residents, to identify and access the services they need. Exacerbating this challenge is the state's need to maintain service levels while the lingering recession strains its resources and forces difficult decisions regarding the reduction or elimination of many services.

The transformation doesn't have to be difficult or particularly expensive, either, since numerous other state governments provide existing examples that can be replicated without huge development or research strategy costs.

Cloud computing can help close the technology gap in government by taking advantage of the cloud for consumer-facing site services to Essentially outsource infrastructure investments, where we don't have to buy, build and manage server farms. Obviously, critical government infrastructure and data (state police; personnel) would probably not go to the cloud under current conditions.

Governments should install Wi-Fi hotspots and wireless neutral host systems like femtocells in all government buildings in order to improve in-building wireless communications coverage and commercial network capacity by offloading wireless traffic onto wireline broadband networks.

Creation of data.ct.gov and video.ct.gov, modeled after the federal efforts would be part of a larger state archive that should include public media and maybe commercial material as well.

Government Meetings, Such As Town Hall Or General Assembly Meetings, Should Be Online With An Interactive Component

What does broadband have to do with civic engagement? Broadband has the potential to transform civic engagement in two principal ways.

First, broadband can strengthen the reach and relevance of mediated and unmediated information in our society. A healthy democracy requires an informed citizenry, and broadband can change the way that people engage this information. This is true for mediated information, such as public media. This is also true for unmediated information, such as the data the government provides citizens.

Second, broadband can enable citizens to engage in their democracy - through a variety of broadband-enabled tools that will make our democracy more participatory and more representative.

Broadband-enabled technologies have already revolutionized the way citizens interact with each other in the private sector. Use of these existing technologies provide state government with established methods for expanding distribution of live or stored resources with minimal research or investment. See below for discussion of how the White House has tapped into its Facebook page to reach millions of participants in its activities with virtually no investment at all.

Companies such as YouTube enable the distribution of "user-generated content" over the Internet. YouTube now supports more than 120 million viewers watching more than 10 billion videos monthly.

And more than 80% of U.S. adults who are online use social media at least once a month, and half of them participate in social networks such as Facebook. Social media and other online strategies are critical tools that public sector organizations use

to encourage transparency, engage constituents, and serve the public in an era of cost cutting. Instant communication between constituents and elected officials is possible through e-mail, online petitions and even social networks.

Today, 26% of Americans are involved in a civic or political group, and more than half of them use digital tools to communicate with other group members.

Government meetings, such as town hall or General Assembly meetings, should be online with an interactive component that would enable the public to ask questions where possible.

Government agencies should expand the use of technology to advance civic participation in electronic rulemaking. The goal should be to use disclosure and new accessibility as a way of obtaining the comments of diverse people and eventually making the rules better.

In evaluating the e-rulemaking process, the government should ask, whether it is taking steps that are actually improving regulations. The biggest challenge at the state level is finding ways to make the interaction meaningful, but certainly state government must work on new e-rulemaking processes, such as creating ways for citizens to leave voicemail messages about proceedings, to offer comment mechanisms through mobile applications.

United State federal e-government issues

At the U.S. federal level, e-government innovations are estimated to have saved the federal government more than $1 billion. The United States is ranked 2nd of the top 50 countries according to the UN's 2010 e-Government Readiness Index, after South Korea, and ahead of Canada and the UK.[1]

Broadband infrastructure has been widely deployed in developed countries, but broadband adoption rates are more variable because of cost and other factors. In 27 of the 30 OECD (Organization for Economic Cooperation and Development) countries, including the United States, broadband has been deployed to 90 percent or more of households, regardless of differences in demographic and geographic factors, while broadband adoption rates are affected by factors such as population, cost, and computer ownership. In the United States, which ranks 15th for both deployment and adoption, broadband has been deployed to 95 percent of households, with 26.4 subscribers per 100 inhabitants—above the OECD average of 23.3.

Data.Gov Platform –

The U.S. federal government has moved to a model of co-innovation in its data.gov platform, where the American people can help create value in a way that we've never been able to do before. Random developers create new apps for accessing and using government data and then the federal government creates a newer version of the app and releases it for the Android platform.

The creation of the data.gov website by the United States government is one of the most substantial steps taken so far to provide such a platform for third parties. Launched in 2009, the website functions as a clearinghouse for datasets generated by

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[1] *$50 Million Budget for Integrated E-Gov*; http://benton.org/outgoingframe/31859

the government in an accessible developer friendly format. Visitors are invited to suggest ideas for additional data and other site enhancements.

U.S. **Government Financing Of E-Government**

The US fiscal 2011 budget creates a $50 million account for the "integrated, efficient and effective uses of information technology." Acceptable uses of the money include governmentwide shared IT resources, consolidated and energy-efficient platforms, IT security services and architectural assistance to make agency IT systems talk to each other better. The Office of Management and Budget would control the pool of money from 2011 through Sept. 2013.

The fiscal move reflects a new attitude toward federal IT. Throughout his first year in office, Obama has pulled together a team of high-ranking officials, from senior advisers to deputy secretaries, who are depending on IT to improve how the government delivers services and formulates policies.

"This funding will provide a central federal strategic resource base controlled by the director of the Office of Management and Budget to be used for rapid development and governmentwide deployment of services and solutions to implement a more integrated, efficient and effective use of information technology in the federal government," the budget states.

The pool of money also would promote a shared services model that the Bush administration tried but hadn't deployed governmentwide. The model is intended to save money by outsourcing IT work to an office that services multiple agencies. "Performance metrics will be established to realize the efficiencies of shared services delivery to federal agencies from a central source," the budget notes.

Separately, the president's request would add $3 million to a $17 million pot of money for "governmentwide innovations, initiatives, and activities" on the condition that the increase fund test projects requiring collaboration among multiple agencies that are aimed at "improving specific outcomes."

Social Media Tools- Use By U.S. Government -

The White House uses the social tools available today, for example, rolling out the 2011 budget through Facebook. That helped leverage an existing network of millions of people without having to build a new government infrastructure. In this way, the federal government didn't have to spend billions of dollars developing these systems, which would take years; instead they simply put it on Facebook.

The initiative Apps for Democracy, implemented in the United States by the District of Columbia, offers a pertinent example. Launched in 2008, Apps for Democracy featured a contest with awards for the best applications built upon data supplied by the district government. In thirty days, at a cost of $50,000 in awards, participants developed applications that would have cost $2.6 million if developed internally by the District. Such a model provides high value for money while mobilizing and leveraging technological capabilities for public use, all factors important to the sustainability of the open data model.

The Federal Emergency Management Agency is set up to use Twitter at all stages of a disaster, before the event strikes, during the event and after, said Administrator Craig Fugate. The agency maintains a Twitter page with just under 30,000 followers, and the administrator himself has a personal page, CraigatFEMA, with almost 6,600 followers. Before a forecast storm hits, today's FEMA can monitor local

weather reports and Tweets to advise the public in the affected area. Fugate said his agency is careful to rely only on official information, such as forecasts from the National Weather Service and links from official emergency management agencies. "It's really important I don't try to pose as a weather service," he said. The agency also uses social media to anticipate what a state might need to prepare for a predicted disaster. http://benton.org/node/49921

A new study ranks the National Aeronautics and Space Administration as the most savvy user of social media and online strategies among public sector organizations surveyed, with the White House second. followed by the animal rights group People for the Ethical Treatment of Animals, the U.S. Army and the Democratic National Committee. Following just two spots below was the DNC's rival, the Republican National Committee.

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E-Government Satisfaction Index

The market research firm ForeSee Results produces a e-government satisfaction index in partnership with ACSI, a performance rating system used by the public and private sectors.

The 2010 ForeSee Results study states that citizens who are highly satisfied with a website are 80 percent more likely to use the site as a primary resource, as opposed to other, more costly channels.

In addition, satisfaction has a direct impact on a person's level of trust and participation in government, past ACSI studies have shown.

This quarter's score remains on par with the all-time high that the government reached last year, down only 0.1 point from 75.2, which is within the margin of error, the report states. Federal sector sites significantly trail private industry sites, like search engines and online stores, but outperform online news sites, including CNN.com and MSNBC.com, which score 74, on average.

Out of the 106 federal sites measured, the top 10 performers are as follows:

1. The Social Security Administration's retirement calculator, 90% (i.e., 90% more likely to use this site as a primary resource, as opposed to other, more costly channels)
2. SSA's tool for obtaining social security benefits, 90%
3. SSA's application for help on covering Medicare prescription drug plan costs, 87%
4. The Health and Human Services Department's MedlinePlus compendium of answers to health questions, 87%
5. HHS' MedlinePlus en español, 86%
6. HHS' website for the National Institute of Arthritis and Musculoskeletal and Skin Diseases, 85%
7. HHS' online gateway to the National Women's Health Information Center, a resource for improving the well-being of women, 84%
8. HHS' homepage for the National Institute of Diabetes and Digestive and Kidney Diseases, 84%
9. The Agriculture Department's portal to guidance on nutrition from the Center for

Nutrition Policy and Promotion, 84%
10. The Defense Department's Navy homepage, 84%

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Examples Of Uses Of E-Government

Connecticut's goal should be to **add hundreds of interesting data points** from agencies on every aspect of government, from health care to education to product safety and homeland security.

Connecticut's **system of record filing and retrieval** at the secretary of the state offers neither the ability to download data in a format other than PDF nor visualization features, and doesn't do it in anything close to real time. The new administration seems prepared to address these deficiencies and hopefully a financially-viable process can be developed to rapidly upgrade the provision of these vital data resources across state government.

The **state's primary governing documents and data** should be made available online in machine-readable form for free, including court documents, since every person who is subject to the laws of this state should have free access to those laws online. Moving all government forms online will greatly reduce and in many cases eliminate paperwork and visits to offices.

Governments can **save precious "counter time"** with routine requests like licensing and tax parcel questions handled on line which is faster, cheaper and consumes fewer resources than paper forms. Highly interactive state websites enable online tutorials for simple government services, e.g., file for a corporation, reducing personnel charges for repeated explanations to customers while allowing customers to review the procedures and instructions at their leisure.

Large files necessary for transactions such as building permits can be transmitted and viewed online, shortening government response time.

Real-time web-displayed **traffic conditions and public transit updates** help commuters navigate more efficiently.

Public government meetings can be joined by constituents across a large geographic region with two-way video streaming.

Criminal justice costs could drop with arraignments, depositions and interpreter services handled through videoconferencing.

Courts Offer Online Payment Of Traffic- Drivers who receive Connecticut traffic tickets or criminal infraction tickets can now pay their fines while sitting at their computers through the state Judicial Branch which recently updated its website so it could process online payments from people using credit cards. The mail-in option is also still available, and paying a ticket by mail or online is considered a plea of no contest. Drivers can still plead not guilty, and that the branch's new online payment service does not take away people's rights to challenge tickets. CT Law Tribune Daily Briefing, 11/1/10.

Management of the public rights of way- is essential to improved broadband access across the state and since there are hundreds of private and public entities that own and control access to poles, ducts, conduits and rights-of-way, and an even greater

number of parties that use that infrastructure. Accurate information about pole owners and attachments is critical if there is to be a timely and efficient process for accessing and utilizing this important infrastructure. State government should ensure that attachers and pole owners have the data they need to lower costs and accelerate the buildout of broadband networks. At present in Connecticut, each of the pole owners and attachers only has access to its own generated data.

Electronic Postmark technology- states should allow government records to be digitally signed, legally certified and delivered electronically by using Electronic Postmark technology. In addition to its simplicity, e-democracy services can reduce costs.

Automotive certification processes upgrades: online renewals of non-commercial drivers' licenses and registrations to be offered through the Department of Motor Vehicles website;

Direct deposit of state payroll checks;

Centralized, uniform electronic process for transmitting and recording **state employee time records** throughout state agencies;

Allow board and commission meetings and hearings to be conducted using online meeting software to **reduce travel reimbursements**;

Reduce **legislator franking costs/expenses** through enhanced use of email to communicate with constituents.

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Malloy/Wyman Transition Team 2010
Technology Work Group Summary to Governor Malloy
January 10, 2011

On behalf of the *Technology Work Group*, I want to thank you for the opportunity to participate in this important transition project. Despite the challenges ahead, you should know there is considerable optimism and hope... and we are proud to have played a small part in helping to move Connecticut forward.

The effective use of technology... will be critical if we are to meet the strategic priorities of every agency. Leveraging technology will be essential... if we are to improve productivity, responsiveness and overall service... while reducing costs and improving economic growth.

Technology touches virtually every area in the State... so we had little difficulty identifying potential recommendations. Our dilemma... was in limiting the overall number of initiatives to a manageable number of immediate priorities.

Executive Leadership:
After discussing our initial recommendations, it became very obvious that the leadership and organization pieces have to be in place. There needs to be someone who has the vision, skills and more importantly, the passion to accomplish the technology goals with an emphasis on accountability. You need an effective quarterback to lead the team.

DOIT Organizational Review:
Conduct a review of the Department of Information Technology organization and chain of command to determine how to best align with the business goals of the agencies and new administration. This is a group of technology professionals that are utilized in a matrix management approach on a project basis. We also think it is important to understand or establish a triage process for managing competing priorities.

Review SDM mandatory requirements:
Review and possibly repeal or modify Governor Rell's Executive Order No. 19 – associated with the System Development Methodology mandatory requirements. This appears to add significant overhead, costs and scheduling delays. There are many proven project management methodologies that could accomplish what SDM was intended.

Core-CT and enhanced Self-Service:
Extend the existing Core-CT centralized financial and HR management system. State already has the software and would increase productivity, ease of use and would be a source of significant cost savings.

Benchmark the IT Domain:

In order to modernize and optimize the technology infrastructure, we need to understand the existing assets by developing a matrix of the State's hardware, software, systems and supporting infrastructure. We believe this assessment should uncover opportunities for shared or reduced costs and areas for integration, consolidation, collaboration and reorganization.

Security Review:

Evaluate existing security procedures and responsibilities to ensure that a effective internet, identity and data security plan is in place.

Redesign CT.gov State Portal:

The State website requires **immediate** and **severe** revision. The current portal is based on an unsupported product... and lacks a true interactive gateway into functions and services.

Document Management;

Utilizing an enterprise Document Management approach will create significant cost savings, convert millions of paper documents to more usable digitized images, automate workflows and enable document reuse.

Educational Delivery:

Expand the use of the Connecticut Education Network (CEN). Increase the availability of online classes throughout the State University System. This is also an area where significant gains can be realized in shared services and reduced/ redundant costs.

IT Procurement:

Although IT procurement has been consolidated under DOIT, further streamlining should occur. Current term and conditions of contracts needs to be reviewed... as it appears they have become too restrictive. Some top vendors do not even attempt to apply. The process appears cumbersome and has added significant costs that are passed on to the State.

Note: These and other technology recommendations have the potential to yield tremendous efficiency gains and literally hundreds of millions of dollars in savings. I was reluctant to discuss such numbers with the press in attendance.

Malloy/Wyman Transition Team 2010, Walt Krauchick, co-chair, (203) 464-4225

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Malloy/Wyman Transition Team 2010
Technology Work Group Action Items to Governor Malloy

The Malloy/Wyman Administration intends "to modernize Connecticut's state systems and services". This will be accomplished through increased and more effective use of the Internet, leveraging previous investments, existing resources, emerging technology and an optimized IT infrastructure and organization. More effective interaction and service delivery between state government, citizens, businesses, non-profit agencies and local government will be the result, which should help fuel economic growth. The Technology Work Group respectfully submits the following action items for consideration in support of the Administration's policy goals:

Enhance Service Delivery

Information technology (IT) services must strategically focus on supplying a structure and statewide (enterprise) strategy for improved service delivery. The State of Connecticut currently lags far behind in utilizing new technologies to serve Connecticut citizens more effectively. Addressing the full range of citizens' complex, and often interrelated needs and delivering improved outcomes, lies at the heart of public service delivery. Front office shared service initiatives offer an approach for facilitating citizen-centric delivery and a powerful means for driving operational efficiencies. They allow organizations to:

- Develop more effective responses to complex needs
- Provide users with a seamless service experience
- Reduce cost-to-be-served
- Achieve efficiencies

The current State portal (ct.gov) is based on an unsupported product that is outdated, and is content management based instead of a true gateway into the functions and services of state government. A competitive process should immediately begin to select the next State portal product.

With this new portal the State can provide an e-government "Front Door" for all government services to make it easier for citizens and businesses to navigate service delivery without worrying about agency boundaries, and to make it easier and more cost effective for the State to build and support. This Front Door would include a single web portal that supports secure transactions such as environmental reporting, obtaining permits and licenses, making financial payments, and providing applications that are prefilled and reusable. This would also support the concept of "No Wrong Door" enabling any agency to assist citizens with all state services as Allegany County, PA has done.

Utilizing the portal to provide e-government the State could save millions as has been proven in the recent online permitting system launched in the capital region which saves 60% in software acquisition and saves vast amounts of times for contractors and home

owners through an end to end online building permitting process resulting in a "win win". There are many similar applications in state government that could have similar results.

Expand the current call center capabilities of the state to provide a unified consolidated Customer Contact Center providing citizens, businesses, and other constituencies with a convenient way to interact with government agencies. As an example, New York City created a central "311" call center, which handles tens of millions of calls from citizens pertaining to hundreds of city organizations and programs. Among the key advantages to the NYC "311" system is that analysis of data enables government agencies to target problems areas and respond to citizen complaints and concerns.
As part of the Customer Contact center implement a statewide Customer Relationship Management (CRM) system that could provide valuable business intelligence to track issues; service-related information and assist management determine where attention/resources are needed to visibly demonstrate the State's commitment to serve/respond to the public, business and other constituents.

Investigate the use of *kiosks* to enable citizens, non-profits and businesses to more conveniently conduct State business. Internet improvements and web-applications should lessen the need for new physical kiosks, especially, considering their costs, competing priorities and the state of the budget. However, it is clear that the ability to file universal, reusable and secure templates for contracts, grants and applications are needed.

As outlined in the Malloy for Governor Campaign Policy Document the State should improve education delivery with expanded use of online classes for higher education as well as K-12 curriculums. A number of states have made strides in this area including North Carolina and Virginia and the CT Distance Learning Consortium has outlined possible next steps.

The Connecticut Education Network (CEN) could be more fully leveraged to connect students individually or by classrooms to classes in other schools. This initiative would not only reduce the cost of education and expand access to specialized classes, but it could be used to provide access to classes that are mandatory for graduation yet are not accessible on a timely basis. The State of North Carolina expects to save approximately $500 million with their initiatives.

Expand Economic Development Opportunities

IT could be an important partner for economic development, both as a subject for job growth and to provide critical support for growing businesses that need to interact with the State. Collaboration between IT and economic development at the state level must be enhanced. Executive level IT leadership needs to be established to ensure that this collaboration occurs.

Since economic development is a key strategic priority of the Governor Elect, the State could use e-government to advance an agenda of small business development through

a world class site such as Australia (www.business.gov.au). Through such a site or portal businesses could be given a single way to interact with the State so that transactions with all agencies such as the Department of Revenue Services, Secretary of State and Department of Labor could be coordinated and linked.

Working in partnership with the University of Connecticut, the Governor Elect will leverage a recently begun collaborative research project in High-performance computing (HPC) to foster start up research firms, bring in high tech jobs and raise the stature of both UConn and the State. Other States like Ohio, North Carolina, Illinois, Georgia, and Massachusetts have all done a great job investing in HPC and thereby bringing high paying jobs into their states.

Both short term and long term opportunities for cost savings and revenue enhancement could be realized.

Provide a More Strategic IT Organization

Currently, the Department of Information Technology (DOIT) is more of a command and control agency. Its focus should be more service oriented. A full review of the current DOIT organizational and chain of command structure must be conducted to determine how it should best align with the business goals of the Governor and the agencies. For example, presently DOIT managers are assigned to line agencies and manage agency IT employees. At times there are conflicts in agency and DOIT priorities creating a fractured management structure that is difficult for managers and meets neither statewide nor agency needs for technology services. DOIT IT managers assigned to line agencies should be employed by the respective agencies, where they can work and advocate for their agency needs. DOIT's current planning and service support processes should be focused on the statewide technology infrastructure, to support and not interfere with agency-specific needs.

The executive leadership must be the IT customer service advocate for the state. To be a more strategic organization a process needs to be established to identify and manage contending priorities, on an ongoing basis. This will enable the extensive State resources, skill sets and expertise in technology to be deployed in a more effective way. An inclusive governance structure should be put into place that includes all agencies utilizing technology services with DOIT, with key decisions being made within this collaborative structure.

The IT agency of the State should focus on meeting business goals and less on rigid bureaucracy. Efficiency can be found by eliminating the System Development Methodology (SDM) mandatory requirements to achieve $3 to $20 million in cost avoidance. Governor Rell's Executive Order 19 should be repealed and emphasis should be placed on employing sound project management methodologies instead of paperwork tracking.

The current IT architecture process is a central unit within DOIT that often dictates direction without an understanding of agency and State business needs. An Enterprise Technology Architecture process should be developed that supports the needs of the State and must be governed and sustained by executive level leadership in the agencies, not in the IT organization. Technology standards for the State would come out of this process supported by statewide rationale and the current process of picking standard products based on procurement needs would be eliminated.

Extend the existing statewide technology infrastructure to support the above business-driven technology architecture to ensure secure connectivity and information access and to make the State more agile and adaptive to the constant changes in program structure and needs in the future. An Executive Steering Committee to govern the State's technology architecture could advise on the investment options needed to build the statewide technology infrastructure.

Savings in this area can be realized immediately and well into the future. An improved IT organization could result in a savings of about $2 million annually and cost avoidance in the areas of process efficiency and better decision making as high as $30 million.

Provide an Optimized IT Infrastructure

Modernizing and optimizing the technology infrastructure should begin by benchmarking the IT domain. Over 15 states have participated in the national state government benchmark program in the areas of Finance, HR, IT, and procurement. Benchmarking allows the government to know precisely which areas are underperforming and which problems to fix.
Develop a matrix of each state agency's hardware, software, systems and supporting infrastructure. This assessment should receive immediate priority because it almost always uncovers significant opportunities for shared/reduced cost and areas for integration, consolidation, collaboration and reorganization.

A review of all current services and staffing should be conducted. When appropriate increase savings by utilizing external IT service options - for example: finish migrating all agencies to Exchange and investigate cloud hosting to reduced costs and increase service delivery, continue to virtualizes servers and investigate virtualization of desktops and PDAs, address reliability and scalability issues, continue to reduce overall system complexity, etc... Utilizing external services could save the State several million dollars per year.

A review of the current IT positions should occur to determine if they are fitting the needs of the State. In particular the State should contemplate establishing a high-end tech series, such as a technology architect series. To conduct this review and continually update the IT positions DAS should hire someone with technology experience and knowledge to review and approve promotions and work on developing new job specs.

When appropriate the State should take advantage state-of-the-art technologies, such as cloud computing to enhance the capabilities of the State technology infrastructure and reduce costs. For example, transition to a private cloud infrastructure, such as running all Oracle databases in a large cluster so the State would achieve better reliability, more efficient utilization of resources and cost savings.

Fully Utilize Current Capability

Currently the State purchases IT software and services with good intention but often does not fully utilize the technology. The following recommendations point to several areas where the State could make better use of the technology it owns.

Continue to leverage the technology of the centralized financial and HR management system, Core-CT to include:

- Full use of self service capabilities including ePay, eProfile, eBenefits
- Full automation of Time and Attendance collection
- Look at Scheduling Front End implementation for applicability to other agencies. This initiative could provide significant capabilities to manage overtime costs.
- Integration of parallel accounting and HR systems

Implement the use of analytics and data mining tools already purchased. For example utilizing such tools that can reduce fraud and abuse in Medicaid (as has been done in North Carolina) to produce savings, merging dispersed and disconnected criminal justice systems or helping assess and find tax cheats in Revenue Services (like in New York) to increase revenue collections. Utilizing business analytics could save the State $40 to $50 million just within Medicaid.

Improve management of the State budget and financial systems by expanding the use of Core-CT, to manage the State's budget operation and provide the unique functions required for both agency-specific and higher-education specific financial and human services management.
Additionally, the State could leverage current investments in workflow and document management software in conjunction with process-improvement initiatives to streamline service delivery to citizens and corporations. Implementing electronic workflow processes across state agencies has resulted in significant cost savings in other states while improving service delivery. Utilizing an Enterprise Document Management approach will convert hundreds of millions of paper documents to digitized images, automate workflows, enable document reuse, improve customer service, provided the basis for data analytics, and create significant cost savings.

Prevent Cyber Security Threats and Protect Critical Data

Establishing and maintaining a strong web presence requires a web security policy to both secure the State's data and ensure that the IT systems are not vulnerable to outside threats. A strong identity management system should be implemented to better understand what information is being accessed and by whom. A review of existing

security policy should be conducted to ensure we are doing everything we can to protect information and infrastructure.

Solid internet, identity and data security will ensure the State does not spend millions to clean up a security breach.

Realize Greater Economies and Efficiencies of Scale in Procurement

Although IT procurement has been consolidated under DOIT, further streamlining should occur. The current process has made it cumbersome to do business with the State and therefore, has added costs for vendors which are passed on to the various state agencies for the solutions they want acquire. In addition, CT does not always get top notch vendors bidding on opportunities. The current terms and conditions of contracts have become too restrictive. Other areas like detailed requirements for Application Development RFP's, fixed pricing, etc. need to be refined so that the State and the vendors are very clear on requirements.
Procuring both services and goods for IT from outside vendors should be truly competitive. The current standards and procurement process does not allow for full and open competition. Standards for products are sometimes selected without requesting input from all vendors.

Standards should be technologically based instead of product based and if research is being conducted a Request for Information or similar notification should be issued so that all companies have an opportunity to respond, not just the companies selected by the standards committee. Also the use of master agreements and sole source contracts should be evaluated. The above changes should enhance transparency and accountability.

Tracking of all purchasing from existing contracts, including local government and educational institutions purchasing, would allow for more accurate assessments of total volume to allow for savings through better pricing points. Volume advantage could also be found in utilizing national contracts like WSCA/NASPO, SGA, etc. CT is a small state and will not necessarily get the largest discounts associated with larger volumes.

Utilize the web to more closely monitor contracts, such as Purchase of Service (POS) and Personal Service Agreements (PSA) could yield savings of 5% to 10% per year or $50 to $100 million dollars.

Speed up and systematize the procurement process for all goods and services purchased by state government by creating an e-procurement solution as modeled by the Commonwealth of Virginia.

Increased procurement proficiency will save time, money and frustration and will enable to State to fully embrace full and open competition.

The above recommendations provide a starting point to more effectively leverage existing state assets to improve customer service, and better connect the state with it citizens, businesses, non-profit agencies and local governments. Also, agencies should be better able to connect with each other to begin data sharing and finding efficiencies in service delivery.

The Technology Work Group stands ready to provide any additional support that may be required.

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Malloy/Wyman Transition Team 2010 - Technology Workgroup
Priorities Grid
December 30, 2010

Technology is a key resource that should be leveraged to meet strategic priorities and support the needs of every agency and business area of the State. Information Technology service is about moving, utilizing and sharing data. Data can provide the business intelligence to drive efficiency, effectiveness, transparency and accountability throughout the State. Connecticut lags far behind when it comes to sharing and utilizing information across the executive branch, as well as, with the other branches of state government, local and federal government, businesses, citizens and other entities. The recommendations below will begin a process to enhance technology services statewide:

PRIORITY INITIATIVES: Things that should be addressed during the **2011** budget/legislative process

	Policy Initiative	**Immediate Fiscal Impact**
1.	**Executive Leadership:** Identify the executive and leadership structure to drive the technology priorities based on agency business needs and the many known challenges. • Select Executive level leadership to ensure collaboration among all elements of government occurs. Represents the state's IT customer service advocate. • Establish an Executive Steering Committee to govern the state's technology architecture and advise on investment options. • Focus on meeting its customers' business goals with accountability/transparency.	Replacement CIO / executive structure accountable to accomplish the technology initiatives.
2.	**DOIT Organizational Review:** Conduct a full internal review of the existing DOIT organization and chain of command to determine how to best align with the business goals of the Governor and the agencies. • DOIT planning and service support processes should be focused on leveraging the statewide technology infrastructure to support agency-specific needs. • DOIT governance should include all agencies with key decisions being made within this collaborative structure.	Budget savings potential in DOIT from eliminating unnecessary management layers. Year One $600K Year Two another $675K Year Three $725K Better agency decision-making

	• DOIT IT managers should be employed/assigned so they can work and advocate for their line agency needs, enabling responsiveness to their client base. • An Enterprise Technology Architecture process should be developed to support the needs of the agencies.	and improved service-delivery process. Identifiable avoidance $2 - 4 M
3.	**Eliminate SDM mandatory requirements:** Repeal Governor Rell's Executive Order No. 19 and replace with proven project management methodologies that are more responsive to business goals and reduce redundancy, overhead and higher project costs.	Significant / immediate efficiency gains with cost avoidance of between $3-20M. Some project management training/tools will be required.
4.	**Core-CT and enhanced Self-Service** • Extend the existing Core-CT centralized financial and HR management system. • Implement the self-service modules. State already has the software. • Upgrade to current release. Would be a later phase with some investment • Can be done concurrently with the Benchmark the IT Domain analysis.	Increased productivity. Ease of use. Savings of $2M to $6M net from implementation of self-service modules.
5.	**Benchmark the IT Domain:** Modernizing and optimizing the technology infrastructure should begin by benchmarking the IT domain. • Develop a matrix of each agency's hardware, software, systems and supporting infrastructure. The goal is to identify further virtualization gains and opportunities for private cloud and database clustering. • It is our belief that there are many very talented state employees that can be tapped into to mobilize "tiger-teams" to tackle the Primary and Short-Term initiatives. • Review current state of IT Security • Commence with a review of the current IT services and staff positions. • DAS should identify or hire someone with technology experience / knowledge to review and approve promotions and work on developing new job specs (such as for Architecture),	Assessment should uncover opportunities for shared/reduced cost and areas for integration, consolidation, collaboration and reorganization. Leverage existing assets to assist in the identification of problem areas. Some external services will be needed until internal expertise is developed in newly adopted

	• Examine the utilization of external services.	technologies. An investment of $100-200K toward software tools/services for benchmark. Peer states recognized positive results and could save several million dollars per year.
6.	**Economic Development:** Economic development is a key strategic priority. Both short term and long term opportunities for cost savings and revenue enhancement should be realized through the expansion of economic development opportunities through collaboration between IT and economic development agencies and administrative actions at the state level. • Utilize e-government to advance small business through a world class business site. • This business oriented site will provide a single source to interact with the state. Transactions with all agencies (Department of Revenue Services, Secretary of the State and Department of Labor) will be streamlined, coordinated and linked. • Partner with the University of Connecticut, to leverage collaborative research project in High-performance computing (HPC) to foster start up research firms, attract high tech jobs and raise the stature of UCONN / State.	Re-engineer existing "CT-CLIC" site to integrate state and local registrations, licensing, permits, fee payments, & schedule inspections. Leverage existing staff with outside web-app developers. Assumption: local participation optional and not state-funded. Products & Services: $800K over 3 years. Will make it easier to do business with the state. Less overhead will help job creation, investment and revenue.
7.	**Funding / Cost Offsets:** • Pursue grants and applications to help fund certain IT proposals necessary for the state to realize improved efficiency productivity and overall public service. • Examine and substantiate the IT budget. The goal would be to confirm the need of each line-item and to develop an inventory and understanding of the relationship to existing systems, infrastructure and agencies.	Begin reallocating the efforts of existing staff. Conservative estimate is 5-10% savings with better understanding of existing assets / terms.

8.	**Strategic Plan:** Create a strategic plan to focus IT services on supplying a statewide *enterprise* strategy for improved service delivery. • Enact systemic changes in Department of Information Technology (DOIT) and other IT operations run by all state agencies to address the full range of customers' complex and often interrelated needs and deliver improved customer outcomes. • Find opportunities where advanced data sharing could benefit the client and agency. • Front office shared service initiatives must be developed to offer a new approach for facilitating customer-centric delivery and for driving operational efficiencies. • Initiatives must focus on reducing cost-to-be-served through more effective responses to complex needs through seamless service delivery systems.	Strategic plan/changes developed by existing staff. Front office shared service initiatives to save $3M per year Reallocating staff for other tasks. Emphasis on leveraging state intellectual capital
9.	**Redesign CT.gov State Portal** The CT.gov State Portal requires immediate and severe revision to increase productivity and reduce costs by revamping this fundamental access route into state government, while decreasing hosting and maintenance costs. This includes the integration of the associated applications/functions. • The current state portal (ct.gov) is based on an unsupported product that is outdated, and is content management based instead of a true interactive gateway into the functions and services of state government, reducing the complexity and number of steps customers must utilize to realize their goals. • The CT General Assembly's Program Review and Investigations Committee has reviewed best practices in CT municipalities and across the U.S. and proven that utilizing an interactive portal to provide e-government the state should save millions in expenses while improving productivity for customers. • Begin a competitive process immediately to select the next state portal product. • Citizens and businesses will easily navigate desired service delivery without dealing with artificial agency boundaries and with reduced bureaucracy. • Will include a single web portal that supports secure transactions such as environmental reporting, obtaining permits and licenses, making financial	State investment approx $1M in a better e-government portal and another $250K in staff training to support/utilize the portal effectively. Cost of services could be reduced by $5-10 M and streamlined with on-line forms, document processing, etc. Will leverage current staff to support. Office expenditures will be reduced.

	payments, and providing applications that are prefilled and reusable. • Will be "No Wrong Door" enabling any agency to assist citizens with state services.	
10.	**IT Procurement:** Although IT procurement has been consolidated under DOIT, further streamlining should occur. • The current cumbersome process has added costs for vendors which are passed on to the state agencies for the solutions they want to acquire. • Current terms and conditions of contracts have become too restrictive, and the use of master agreements and sole source contracts should be evaluated for immediate implementation. • Contract requirements need to be refined so that the state and the vendors are very clear on requirements, and the process must be transparent and truly competitive to a broad array of bidders. • Tracking of all purchasing from existing contracts, including local government and educational institutions purchasing, would allow for more accurate assessments of total volume to allow for savings through better pricing points. • Volume advantage should also be realized in national contracts, as well as contacts from other governmental entities, such as higher education. • Utilize the web to more closely monitor contracts, such as Purchase of Service (POS) and Personal Service Agreements (PSA) which should yield savings of 5% to 10% per year.	Large volume contracts for savings. $2-4M savings with an RFP process that emphasizes business requirements over desired products. Master contracts open to bidding to produce more vendors and increased price competition. Replaces just receiving updated price schedules. Improved contract administration should yield $50 to $100M savings annually. Represents conservative 5-10% of current spending. Quality assurance of RFP deliverables will ensure state gets what they paid for/avoid excessive change orders - saving $2-4 M per year.

SHORT-TERM INITIATIVES: Things that should be addressed by 2012/2013

	Policy Initiative	Short Term Fiscal Impact
1.	Continue work and momentum gained in above immediate priorities	
2.	**Leverage Existing IT Assets:** Overall, make better use of existing IT technology software, hardware and resources. It should be noted that this is an extension of several of the Primary initiatives – especially, Benchmarking the IT Domain. • Provide advanced technology processes to uncover tax evaders in Revenue Services. • Enhance the use of analytics and data mining tools for other potential savings. • Merge dispersed or disconnected criminal justice systems. • The state should make a concerted effort to expand the HHS data warehouse utilizing as much as 90% federal funding to implement.	Approximately 1200+ servers some of which are underutilized. Increased revenue collections. Can reduce fraud / abuse by $40 to $50M in Medicaid alone. Can produce financial and productivity efficiencies. Increase federal matching funds.
2.	**Document Management:** Utilizing an Enterprise Document Management approach will create significant cost savings, convert hundreds of millions of paper documents to more usable digitized images, automate workflows, enable document reuse, improve customer service, and provide the basis for data analytics. Again, this is an extension of several Primary initiatives – especially, the Redesign of the State Portal. • Expand the uses of the existing Core-CT to manage the state's budget operation and provide the unique functions required for both agency-specific and higher-education specific financial and human services management. • The state should leverage current investments in workflow and document management software in conjunction with process-improvement initiatives to streamline service delivery to citizens and corporations. • Implementing electronic workflow processes across state agencies will result in significant cost savings while improving service delivery.	The state has an enterprise license to support a statewide (enterprise) document library. It still needs to invest in the workflow licenses that would leverage the use of e-forms and documents to streamline current service delivery. The investment should be on an agency basis and cost up to $500K per agency (with staff training), but offset by increased workflow efficiencies and faster service delivery within 18 months. Some agencies already have workflow licenses

		and should be encouraged to be the models for process streamlining in other agencies. Most implementations of workflow requires outside support services and staff training costing approximately $200K to leverage the investment in software effectively. Significant cost savings
3.	**Security:** Evaluate existing security procedures, responsibilities and plans. Again, this important topic will also get attention when evaluating and benchmarking the IT Domain. • Ensure a solid internet, identity and data security plan is in place.	State must continue to enforce identity & data management practices, and institute on-demand online employee training/refresher sessions on security compliance: $300K/year Risk and cost avoidance.
4.	**State Call Center:** As part of the Customer Contact center implement a statewide Customer Relationship Management (CRM) system. This will provide valuable business intelligence to track issues; service-related information and assist management determine where attention/resources are needed to visibly demonstrate the state's commitment to serve/respond to the public, business and other constituents. • Expand current call center capabilities to provide a consolidated Customer Contact Center providing a convenient way to interact with government agencies while reducing expenses. • This will provide government agencies with data analysis to target problems areas and most effectively respond to citizen complaints and concerns. This information is critical when evaluating statewide priorities for competing budget items.	Expanded State Call Center by service type (human services, business/econ dev services, ed services, regulatory/compliance services), Adding one each year over 4 years: $1.5-M/year Provide agencies the business intelligence to manage priorities. CRM components, including registration and directory customization, history files,

	• Investigate the use of *kiosks* to enable citizens, non-profits and businesses to more conveniently conduct state business. Internet improvements and web-applications should lessen the need for new physical kiosks, especially, considering their costs, competing priorities and the state of the budget.	enhanced each year: $500K/year New physical kiosks could be difficult to maintain/justify. Existing library-based computers are a viable alternative.
5.	**Improve Educational Delivery:** Expanded use of online classes for higher education as well as K-12 curriculums. Will reduce state expenses and provide increased access to classes that are locally unavailable or mandatory for graduation yet are not accessible on a timely basis. • The Connecticut Education Network (CEN) should be more fully leveraged to connect students individually or by classrooms to classes in other schools, particularly in light of the recent liberalization by the FCC of federal E-Rate funding intended to expand use of this existing and powerful broadband resource. • The CT Distance Learning Consortium (CDLC) plan should be examined and implemented as needed.	RESCs could lead districts in sharing online material, using existing program resources. CDLC and similar collaborative resource-sharing programs should be encouraged as cost-avoidance goals by districts community colleges and universities. Online course access should be encouraged where useful for lifelong learning purposes.
6.	**Expand the use of the CEN:** The Connecticut Education Network (CEN) was created and funded by the State to be used by K-12 school districts, higher education campuses and libraries could be expanded to the municipal governments so all municipalities would have a permanent form of high speed internet access and high speed intranetworking capabilities among municipalities for technology services.	Savings and increase service for Municipalities.

LONG-TERM INITIATIVES: Things that should be considered beyond 2013

	Policy Initiative	Long Term Fiscal Impact
1.	Continue work and momentum gained in above immediate and short term priorities	
2.	When appropriate the state should take advantage of state-of-the-art technologies to enhance the capabilities of the State technology infrastructure and reduce costs. • Transition to a private cloud infrastructure • Run all Oracle databases in a large cluster so the state would achieve better reliability, more efficient utilization of resources and cost savings. NOTE: Much of this is recognition of the need to continue or go beyond the Primary and Short-term initiatives on a more specific level.	Private cloud and database clustering are two different examples ripe for expansion. Significant savings should be realized in this area.

On items in which there was not consensus, please append any dissenting opinions.

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The **Connecticut Broadband Internet Coordinating Council** was established pursuant to Section 3 of Substitute House Bill No. 7282, Public Act No. 07-254 (see excerpt). The legislation was the result of a December 2006 study by the Connecticut Academy of Science and Engineering entitled, "Advanced Communications Technologies."

The legislation was adopted under section 4d-100 of the Connecticut General Statutes.

TITLE 4d STATE INFORMATION AND TELECOMMUNICATION SYSTEMS
CHAPTER 61c BROADBAND INTERNET AND COMMUNICATIONS INFRASTRUCTURE

Conn. Gen. Stat. § 4d-100 (2008)
Sec. 4d-100. Broadband Internet Coordinating Council. Membership. Duties.

(a) There shall be a Broadband Internet Coordinating Council, which shall include representatives from both the private and public sectors. The council shall consist of ten members, two of whom shall be appointed by the Governor, two of whom shall be appointed by the president pro tempore of the Senate, two of whom shall be appointed by the speaker of the House of Representatives, one of whom shall be appointed by the majority leader of the Senate, one of whom shall be appointed by the majority leader of the House of Representatives, one of whom shall be appointed by the minority leader of the Senate and one of whom shall be appointed by the minority leader of the House of Representatives. One of each of the two members appointed by the Governor, the president pro tempore of the Senate and the speaker of the House of Representatives shall have specific expertise in the area of telecommunications. Members of the council shall serve without compensation, except for necessary expenses incurred in the performance of their duties. Members shall serve on the council for terms of two years each and no member shall serve for more than two consecutive terms. The chairperson of the Public Utilities Control Authority, or the chairperson's designee, and the Secretary of the Office of Policy and Management, or the secretary's designee, shall be ex-officio members of the council without vote and shall attend its meetings. Any member who fails to attend three consecutive meetings or fifty per cent of all meetings during any calendar year shall be deemed to have resigned. The president pro tempore of the Senate and the speaker of the House of Representatives shall jointly choose a chairperson and a vice-chairperson to act in the chairperson's absence.

(b) The council shall meet at least quarterly, commencing on or before September 1, 2008. A majority of the members in office shall constitute a quorum.

(c) The duties of the council shall be to: (1) Monitor trends and developments in the state's efforts to develop a state-wide world-class communications infrastructure; and (2) issue any reports it deems necessary to the joint standing committee of the General Assembly having cognizance of matters relating to technology.

Council Members
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Robert P. Vietzke, *Vice Chairman* Executive Director, Network Services, Internet2
Michael A. Chowaniec Area Director, Government Affairs – CT, Cablevision
Burton B. Cohen Partner, Murtha Cullina LLP
Robert Earley Director of Government Relations – Comcast
John R. Emra Regional Vice President, AT&T
Jack McCoy CIO, Town of Manchester
Matt Miller Consultant
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